



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,972	01/16/2004	James Stoffer	423.027US1	6512

7590 12/30/2005
Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402

EXAMINER

RONESI, VICKEY M

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,972

Applicant(s)

STOFFER ET AL.

Examiner

Vickey Ronesi

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62, 67-70, 99-133 and 136-183 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/04, 3/16/05, 8/26/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continuation of Disposition of Claims: Claims withdrawn from consideration are 8,9,12,23-29,32-34,46,49,99-120,123-126,136,140,154-159,162,163 and 169-183.

Continuation of Disposition of Claims: Claims rejected are 1-7,10,11,13-22,30,31,35-45,47,48,50-62,67-70,121,122,127-133,137-139,141-153,160,161 and 164-168.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the restriction and election of species in the reply filed 8/26/2005 is acknowledged. The traversal is on the grounds that the elected claims (Group I) are closely related to the claims in the withdrawn claims (Group II) and therefore presents no undue burden on the examiner. This is not found persuasive because while a coating composition and the resultant coating are related, the restriction is proper since a coating composition is the intermediate in an intermediate-final product relationship. In particular, the coating is cured and thus physically transformed when made into a coating. Furthermore, the coating claims include a laminated structure (i.e., a substrate coated with the composition) which is outside the scope of coating composition claims.
2. The restriction requirement is still deemed proper and is therefore made FINAL.
3. Applicant's election of "mixed oxides" in the reply filed 8/26/2005 and "linear and cyclic dextrans" in the reply filed 10/17/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the election of species requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
4. The following claims are now withdrawn pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention: 8, 9, 12, 23-29, 32-34, 46, 49, 99-120, 123-126, 136, 140, 154-159, 162, 163, and 169-183. Newly added claims 154-159, 162, 163, and 169-183 fall with the scope of Group II or a non-elected species are therefore withdrawn.

Art Unit: 1714

Claim Objections

5. Claim 141 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. The range of “up to about 40 wt %” is broader than the range of claim 1 (on which claim 141 is dependent) which is “at least about 1 wt %.” The range of “up to about 40 wt %” includes amounts less than 1 wt % which falls outside the scope of present claim 1.

6. Applicant is advised that should claim 11 be found allowable, claim 56 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-22, 30, 31, 67-69, 127-131, 141-146, and 164-168 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The

Art Unit: 1714

claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 1, 13, 14, 67, 144-146, and 164, applicant has newly added the following amount ranges: “at least about 1 wt %,” “at least 3 wt %,” “at least about 28 wt %,” and “at least 40 wt %.” It is the examiner’s position that these open-ended ranges fail to satisfy the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of open-ended ranges in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed. While there is support for “the coating contains between about 0.1 to about 28 wt %, of a rare earth compound” on page 10, paragraph 0032 (also see Table A page 18) of the specification, there is no support for either an open-ended range or a range with endpoints including 1, 3, or 40 wt %. Case law holds that, with respect to changing numerical range limitations, the analysis must take into account which ranges one skilled in the art would consider inherently supported by the discussion in the original disclosure, *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

With respect to claims 2-12, 15-22, 30, 31, 68, 69, 127-131, 141-143, and 165-168, they are rejected for being dependent on a rejected claim.

Art Unit: 1714

8. Claims 133 and 143 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 133, it is dependent on a canceled claim.

With respect to claim 143, the term “the praseodymium (III/IV) mixed oxide” lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-5, 7, 10, 11, 13, 17, 19, 20, 56-59, 67, 68, 139, 141-144, 149, 150, and 164-166, rejected under 35 U.S.C. 102(b) as being anticipated by Andou (US 6,294,006, cited on IDS dated 8/23/2004).

Andou discloses an anticorrosive paint to protect steel ships and pipes comprising a binder (col. 5, lines 23-30) and 8-15 wt % of an anticorrosive and antifouling additive containing rare earth metal oxides such as Pr_6O_{11} , which is mixed oxide praseodymium (III/IV) oxide (col. 3., line 67 to col. 4, line 38). The amount of Pr_6O_{11} calculates to be about 3 wt % to about 4 wt % based on the coating composition.

In light of the above, it is clear that Andou anticipates the presently cited claims.

Art Unit: 1714

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-7, 13-20, 30, 31, 35-38, 40-45, 50-52, 54, 55, 67-70, 121, 122, 127-129, 131, 133, 137-139, 141, 142, 147-152, 160, 164, and 166-168 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoji et al (US 6,190,780, cited on IDS dated 8/23/2004).

Shoji et al discloses a corrosion-resistant coating composition (col. 12, line 21 to col. 13, line 37) comprising rare earth oxyacids and/or hydroxyacids (col. 7, lines 35-46); optionally rare earth (i.e., praseodymium) oxides hydroxides, or sulfates in suitable amounts (col. 9, lines 49-63); compounds that reinforce the corrosion-resistance such as sodium sulfates (i.e., extenders) (col. 11, lines 4-19); a resin such as epoxy resins (col. 13, lines 23-32); titanium dioxide (col. 15, line 13); and a dispersant (col. 13, line 35).

While Shoji et al does not exemplify a coating composition containing the presently claimed combinations of ingredients in specific amounts, given that Shoji et al teaches a corrosion-resistant coating composition which does or can contain the presently claimed ingredients either as a binder or as an additive to aid in corrosion resistance with guidance to determine suitable amounts and solubility parameters (col. 9, lines 55-63; col. 12, lines 52-67; col. 14, lines 53-62), it would have been obvious to one of ordinary skill in the art to utilize a corrosion-resistance composition containing an appropriate binder and various anticorrosion additives in suitable amounts, including those presently claimed, absent any showing of

Art Unit: 1714

unexpected or surprising results regarding the presently claimed combination of ingredients, and thereby arrive at the presently cited claims.

11. Claims 7, 10, 11, 45, 47, 48, 56-59, 61, 62, 68, 132, and 142-146, 150, 161, 165, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoji et al (US 6,190,780, cited on IDS dated 8/23/2004) in view of Andou (US 6,294,006, cited on IDS dated 8/23/2004).

The discussion with respect to Shoji et al in paragraph 10 above is incorporated here by reference.

While Shoji et al discloses the use of rare earth metal oxides, it fails to disclose the use of mixed oxides, in particular praseodymium (III/IV) mixed oxide.

Andou discloses an anticorrosive paint to protect steel ships and pipes comprising a binder (col. 5, lines 23-30) and 8-15 wt % of an anticorrosive and antifouling additive containing rare earth metal oxides such as Pr_6O_{11} , which is praseodymium (III/IV) oxide, a mixed oxide (col. 3., line 67 to col. 4, line 38).

Given that Pr_6O_{11} (i.e., praseodymium (III/IV) oxide) is an anticorrosive additive as taught by Andou, it would have been obvious to one of ordinary skill in the art to utilize the praseodymium mixed oxide as one of the anticorrosion additives of Shoji et al since it teaches the use of rare earth metal oxides and thereby arrive at the presently cited claims.

12. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoji et al (US 6,190,780, cited on IDS dated 8/23/2004) in view of Oakes (US 4,370,256).

Art Unit: 1714

The discussion with respect to Shoji et al in paragraph 10 above is incorporated here by reference.

Shoji et al does not disclose the use of calcium sulfate but teaches the use of additional compounds that reinforce the corrosion-resistance (col. 11, lines 4-19).

Oakes discloses corrosion-inhibiting agents and teaches that dextrin has been used effectively as a corrosion inhibitor (col. 2, line 11; col. 3, lines 2-5 and 47-50).

Given that Shoji et al is open to the use of other anticorrosive additives and further given the teaching by Shoji et al that dextrans are known corrosion inhibitors, it would have been obvious to one of ordinary skill in the art to utilize a dextrin corrosion inhibitor in the composition of Shoji et al and thereby arrive at the presently cited claims.

13. Claims 39, 130, and 153 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoji et al (US 6,190,780, cited on IDS dated 8/23/2004) in view of Reuter et al (US 2003/0082368).

The discussion with respect to Shoji et al in paragraph 10 above is incorporated here by reference.

Shoji et al does not disclose the use of calcium sulfate but teaches the use of additional compounds that reinforce the corrosion-resistance (col. 11, lines 4-19).

Reuter et al discloses an aqueous coating material and teaches that typical anticorrosion pigments include calcium sulfate, barium sulfate, etc (paragraph 0069). Although both Shoji et al and Reuter et al are silent with respect to appropriate amounts of anticorrosion pigments, it is

Art Unit: 1714

considered that it would have obvious to one of ordinary skill in the art to utilize appropriate amounts of anticorrosion pigments, including those within the scope of the instant claims.

Given that Shoji et al is open to the use of other anticorrosive or rustproof pigments and given the teaching by Reuter et al regarding that calcium and barium sulfates are typical and well known anticorrosion pigments, it would have been obvious to one of ordinary skill in the art to utilize a calcium or barium sulfate as the anticorrosive pigment and thereby arrive at the presently cited claims.

14. Claims 53 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoji et al (US 6,190,780, cited on IDS dated 8/23/2004) or in view of Andou (US 6,294,006, cited on IDS dated 8/23/2004), and further in view of Tucker (US 3,837,894).

The discussion with respect to Shoji et al and/or Andou in paragraphs 10 and 11 above are incorporated here by reference.

Shoji et al does not disclose the use of an inorganic binder such as that based on a silicone resin but appears to be open to other suitable resins (col. 13, lines 23-32).

Tucker discloses a corrosion resistant coating and teaches that epoxy resins (which are taught by Shoji et al) and silicone resins are advantageously used because they are highly resistant to many aqueous corrosive environments (col. 1, lines 31-34).

Given that Shoji et al is open to the use of other resins not disclosed and further given that silicone resins are advantageously used like epoxy resins, it would have been obvious to one of ordinary skill in the art to utilize a silicone resin in the composition of Shoji et al and thereby arrive at the presently cited claims.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1-7, 11, 15, 17, 35, 70, and 151 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 39-41 of copending Application No. 10/758,973 (published as US 2004/0186201, cited on IDS filed 3/16/2005). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US appl. ‘973 claims a coating composition comprising one or more rare earth oxide compounds, a binder, and one or more neutral to slightly acidic generating extenders. While US appl. ‘973 claims, in addition to the presently claimed ingredients, a corrosion-inhibiting carbon pigment, the scope of the instant claims clearly encompass the cited claims of US appl. ‘973 and thus is rendered obvious over US appl. ‘973.

Art Unit: 1714

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Contact Information

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/23/2005

vr



Vasu Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700